

ACTIVITY-BASED BATTERY MONITOR WITH A UNIVERSAL CURRENT MEASURING APPARATUS

ABSTRACT OF THE DISCLOSURE

A battery monitoring apparatus that obtains a current
5 measurement for a current in a conductive element. The battery
monitoring apparatus includes conductive lines configured to couple to a
conductive element having an electrical current, a filter coupled to the
conductive lines and configured to filter noise from a signal derived from a
voltage difference between the conductive lines, an analog-to-digital
10 converter that converts the signal filtered by the filter and outputs a
digital signal, and a controller that receives the digital signal from the
analog-to-digital converter.